
















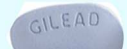



HIV SINGLE TABLET REGIMENS

1 Tablet - Once Daily

Brand Names	NRTI Backbones		Add-on Antiretroviral				AIDSinfo Rating*	Considerations	Lab Monitor
	1 st NRTI	2 nd NRTI	Integrase Inhibitor	N-NRTI	PI	PK Booster			
 Biktarvy	Emtricitabine 200mg	Tenofovir TAF 25mg	Bictegravir 50mg				A1	<ul style="list-style-type: none"> < 30ml/min not recommended Severe hepatic impairment not recommended CI w/ dofetilide or rifampin w/ or w/o food Good Lipid profile- consider for high cardiac risk Severe acute exacerbation of Hep B upon d/c 	Renal function
 Triumeq	Lamivudine 300 mg	Abacavir 600 mg	Dolutegravir 50 mg				A1	<ul style="list-style-type: none"> W or w/o food. Ca 2 hrs before or 6 hrs after. HLA-B*5701 has to be -ve before giving abacavir No major CYP drug interactions ☺ Largest size tablet CI w/ dofetilide or rifampin 	HLA-B*5701
 Stribild	Emtricitabine 200 mg	Tenofovir TDF 300 mg	Elvitegravir 150 mg			Cobicistat 150 mg	B1	<ul style="list-style-type: none"> Take with food TDF → Can use until 70 mL/min TAF → Can use until 30 mL/min Genvoya only single-tab pill to use till 30 mL/min Cobi inhibits renal tubular secretion of creatinine Cobi has many drug inx via CYP3A4 inhibition (avoid w/ drugs highly dependent on CYP3A4 clearance) 	Renal Function BMD Lipids
 Genvoya	Emtricitabine 200 mg	Tenofovir TAF 10 mg	Elvitegravir 150 mg			Cobicistat 150 mg	B1	<ul style="list-style-type: none"> W or w/o food. Ca 2 hrs before or 6 hrs after < 50ml/min or Child-Pugh C not recommended CI w/ dofetilide 	Renal Function Lipids
 Dovato	Lamivudine 300mg	-	Dolutegravir 50 mg				B1	<ul style="list-style-type: none"> W or w/o food. Ca 2 hrs before or 6 hrs after < 50ml/min or Child-Pugh C not recommended CI w/ dofetilide 	Renal function
 Juluca	-	-	Dolutegravir 50mg	Rilpivirine 25mg			A1	<ul style="list-style-type: none"> Maintenance Therapy—for those already virologically suppressed and no known resistance Take with a meal HSR, Hepatotoxicity C/I: Dofetilid, PPI Monitor for ADE if CrCL < 30ml/min 	Renal Function, Liver Function
 Delstrigo	Lamivudine 300mg	Tenofovir TDF 300mg		Doravirine 100mg			B1	<ul style="list-style-type: none"> Not recommended in CrCL < 50ml/min w/ or w/o food May exacerbate hepatitis upon discontinuation Avoid w/ strong CYP3A4 inducers (ie Rifampin) 	Renal Function
 Atripla	Emtricitabine 200 mg	Tenofovir TDF 300 mg		Efavirenz 600 mg			B2	<ul style="list-style-type: none"> Keep in mind CNS adverse effects of Efavirenz Not recommended CrCL < 50ml/min C/I: bepridil, elbasvir/grazoprevir 	Renal Function Lipids
 Complera	Emtricitabine 200 mg	Tenofovir TDF 300 mg		Rilpivirine 25 mg			B1	<ul style="list-style-type: none"> Take with meal (~ 350 kcal) for abs'n of RPV Use if HIV RNA < 100,000 & CD4 > 200 Avoid: Acid suppressing (PPI C/I) RPV fewer CNS s/e compared to Efavirenz RPV fewer rash and dyslipidemia than Efavirenz 	Renal Function BMD
 Odefsey	Emtricitabine 200 mg	Tenofovir TAF 25 mg		Rilpivirine 25 mg			B1	<ul style="list-style-type: none"> RPV fewer CNS s/e compared to Efavirenz RPV fewer rash and dyslipidemia than Efavirenz 	Renal Function
 Symtuza	Emtricitabine 200mg	Tenofovir TAF 10mg			Darunavir 800mg	Cobicistat 150mg	A1	<ul style="list-style-type: none"> Take with food Not recommended in CrCL < 30ml/min or Severe hepatic impairment C/I: Alfuzosin, Amiodarone, Bepridil 	Renal Function


*Strength of Recommendation: A=strong, B=moderate, C=optional. Quality of Evidence: I=≥1 randomized trials with clinical outcomes/validated lab endpoints, II=≥1 non-randomized trials/observational cohort studies with long-term clinical outcomes, III=expert opinion





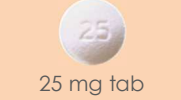
HIV Antiretroviral (ART) Medications




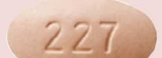
Class	Generic	Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments		
Combined NRTI Tablet Formulations										
Nucleoside / Nucleotide Reverse Transcriptase Inhibitors - NRTI	AIDSinfo rating: paired with INSTI: Dolutegravir A1 Raltegravir B1 or a boosted PI: Darunavir A1 Atazanavir B1	Emtricitabine, tenofovir alafenamide	FTC, TAF	Descovy		Emtricitabine 200 mg/TAF 10 or 25 mg	1 tablet daily	Mostly Well Tolerated • N/V/D/Gas	TAF- Substrate of P-gp and BCRP	<ul style="list-style-type: none"> ✓ only combo also effective against Hep B ✓ Better viral suppression than Kivexa if VL > 100,000 ✓ TAF has ↓ rates of renal insufficiency and bone mineral density reduction vs TDF ✓ If on a booster, use 10 mg TAF instead of 25 mg ✓ Not recommended if Clcr<30 mL/minute or hemodialysis (HD)
		Emtricitabine, tenofovir disoproxil fumarate	FTC, TDF	Truvada		Emtricitabine 200 mg/TDF 300 mg	1 tablet daily	Mostly Well Tolerated • N/V/D/Gas • Renal impairment • Reduced bone density	↓ [atazanavir]; need to boost	<ul style="list-style-type: none"> ✓ only combo also effective against Hep B ✓ Better viral suppression than Kivexa if VL > 100,000 ✓ Renal dosing: 1 tablet q2days if Clcr 30-49 mL/minute; not recommended if <30 mL/min or HD
	paired with: Darunavir B2 Atazanavir C3 Efavirenz C1 Raltegravir C2	abacavir, lamivudine	ABC, 3TC	Kivexa		Abacavir 600 mg/lamivudine 300 mg	1 tablet daily	Mostly Well Tolerated • Headache/N//D/malaise • Hypersensitivity reaction		<ul style="list-style-type: none"> ✓ Abacavir not ideal for those with CV risk factors ✓ HLA needs to be negative before giving abacavir ✓ Comments also applies to Triumeq
Single Agent NRTI Formulations										
MOA: Analogues of nucleo(t)side which replace a base during reverse transcription of viral RNA to DNA → chain termination Resistance: - "low genetic barrier to resistance" - many mutations confer cross resistance to others in the class Renal Dosing: Use with caution & check for renal dosing for each agent	Tenofovir alafenamide Adenosine analogue Nucleotide Reverse Transcriptase Inhibitor (NtRTI)	TAF	Vemlidy (for chronic HBV)		Descovy ^{1 QD} Genvoya ^{1 QD} Odefsey ^{1 QD} Biktarvy ^{1 QD} Symtuza ^{1 QD}	25 mg po QD (10 mg po QD if using with booster) Renal	Mostly Well Tolerated • N/V/D/Gas	TAF- Substrate of P-gp and BCRP	<ul style="list-style-type: none"> ✓ TAF = tenofovir alafenamide (targeted pro-drug), less bone & renal issues ✓ safe until renal function with CrCl of 30 mL/min ✓ Preferred agent in cases of co-infection with HBV 	
	Tenofovir disoproxil fumarate Adenosine analogue Nucleotide Reverse Transcriptase Inhibitor (NtRTI)	TDF	Viread		Truvada ^{1 QD} Stribild ^{1 QD} Complera ^{1 QD} Delstrigo ^{1 QD} Atripla ^{1 QD}	300 mg po QD Renal avoid TDF in CKD	Mostly Well Tolerated • N/V/D/Gas • Renal impairment ^{TDF} • Reduced bone density ^{TDF}	↓[atazanavir] ↑[didanosine - ddi] Clinically not used with TDF anyways any longer	<ul style="list-style-type: none"> ✓ TDF = tenofovir disoproxil fumarate (pro-drug), efficacy of TDF = TAF ✓ Renal: < 10 mL/min not recommended, 10 - 29 mL/min give 300 mg po q72-96h, 30-49 mL/min give 300 mg po q48h, ≥ 50 mL/min no adjustment ✓ Preferred agent in cases of co-infection with HBV ✓ Favorable lipid profile 	
	Emtricitabine Cytidine analogue	FTC	Emtriva		With TAF or TDF products above	200 mg po QD ^{cap} 240 mg po QD ^{sol'n} Renal	Well Tolerated • Headache ^{common} , dizziness • N/D • Rash, skin pig'n	Lamivudine [X] → both Cytosine analogues (no point in using both)	<ul style="list-style-type: none"> ✓ Black Box: severe exacerbation of hep B on stopping drug in pts w Hep B ✓ Only part of combos w Tenofovir in Canada ✓ Rarely pts may experience bad diarrhea. Headache most common s/e. 	
	Abacavir Guanosine analogue	ABC	Ziagen		Kivexa ^{1 QD} Triumeq ^{1 QD} Trizivir ^{1 BID}	300 mg po BID 600 mg po QD can safely use in CKD	Common: • Headache, N/D, malaise Serious: Hypersensitivity reaction (HSR)		<ul style="list-style-type: none"> ✓ Black Box: Only Rx for HLA-B*5701 negatives → Testing predicts HR in Caucasians. Rechallenge in HSR patients C/I → life threatening ✓ Signs of HSR: fever, rash, tired, upset stomach, vomit, belly pain, flu-like sx, sore throat, cough. Occurs < 6 wks after start (mean 11 days). Stop ASAP & see MD. ✓ Meta-analysis → no sign of ↑ MI → but if higher MI risk, ABC not best choice ✓ Can cause hepatitis and lactic acidosis esp in women and obese 	
	Lamivudine Cytidine analogue	3TC	3TC		Kivexa ^{1 QD} Triumeq ^{1 QD} Dovato ^{1 QD} Delstrigo ^{1 QD} Combivir ^{1 BID} Trizivir ^{1 BID}	150 mg po BID 300 mg po QD Renal	Well Tolerated • Headache ^{beginning} • N/D/Abd pain ^{transient} • Insomnia ^{uncommon} • Pancreatitis ^{more peds}	Emtricitabine [X] → both Cytosine analogues (no point in using both)	<ul style="list-style-type: none"> ✓ Some people have headache in first few days, stick with it and use Tylenol and Advil if needed ✓ May exacerbate Hep B upon discontinuation 	





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HIV Antiretroviral (ART) Medications

Class	Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Zidovudine no longer recommended as first-line therapy for most patients	Zidovudine Thymidine analogue	AZ	Retrovir	 100, 250 mg cap 10 mg/mL syrup 10 mg/mL inject	Trizivir ¹ BID Combivir ¹ BID	300 mg po BID Also I.V. form Renal	Not Well Tolerated <ul style="list-style-type: none"> • Headache^{62%} • N^{50%} / V^{17%} / Anorexia^{20%} • Insomnia • Nail pigmentation • Hematologic toxicity 	stavudine [X] also a thymidine analogue	<ul style="list-style-type: none"> ✓ Black Box: hematologic toxicity, myopathy, anemia, granulocytopenia, thrombocytopenia ✓ Often in subtherapeutic mono- and dual therapy regimens ✓ Resistance likely in Long term survivors ✓ Place for therapy: IV form and syrup still used in MTCT in <i>pregnancy and delivery</i> and infants with HIV ✓ No longer recommended

Class		Generic		Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Non-nucleoside RT Inhibitors - NNRTI	NNRTI <u>vir</u>	Doravirine	DOR	Pifeltro	 100mg tab	Delstrigo ^{TDF 1 QD}	100mg po OD	Well tolerated Common SE • Headache • Diarrhea, Ab pain • Abnormal Dreams	Cyp3A4 Substrate	<ul style="list-style-type: none"> ✓ Take BID if using with rifabutin ✓ Taken without regards to food ✓ Favourable Lipid profile – consider for high cardiac risk ✓ Avoid use with Strong inducers of CYP3A4 (ie Carbamazepine, rifampin)
		Efavirenz	EFV	Sustiva	 600 mg tab 50, 200 mg cap	Atripla ^{TDF 1 QD}	600 mg po QD <i>avoid fatty meals on empty stomach (inc abs'n leading to s/e)</i>	CNS S/E ^{52%} • Dizziness, vivid dreams • Insomnia, somnolence • Impaired concentration • Hyperlipidemia • Rash 26% (can treat through it mostly)	CYP3A4 & 2B6 Substrate Potent inducer of CYP3A4, 2B6, UGT1A1 Inhibitor of CYP2C9/2C19/3A4 ↑ [Cocaine] ↓ [conc] of: • Benzos (-olam are issues, -pams are ok) • most opioids	<ul style="list-style-type: none"> ✓ Let MD know if history of psych illness → should avoid this med ✓ Vivid dreams bothersome to some, enjoyable to some other ✓ CNS s/e worst after 1st or 2nd dose, get better in 2-4 weeks ✓ if you're on methadone, monitor for symptoms of opioid withdrawal ✓ May cause false +ve cannabinoid test ✓ May cause fetal harm (neural tube defect) if exposed during first trimester but data is limited thus currently no restriction for its use during pregnancy ✓ C/I: Elbasavir/ Grazoprevir ✓ Inducers of CYP3A4 will decrease serum concentration of EFV
		Etravirine	ETR	Intelece	 100, 200 mg tab	None	200 mg po BID or 400 mg po QD <i>w/ food</i>	<ul style="list-style-type: none"> • Rash 9% • Dyslipidemia • Nausea • Rhabdomyolysis uncommon 	CYP3A4, 2C9, 2C19 substrate Weak inducer of CYP2B6/ 3A4 Weak Inhibitor of 2C9/ 2C19	<ul style="list-style-type: none"> ✓ Tabs are large: dissolve readily in water for liquid dosing, however whole tablet is chalky, large and often difficult to swallow. ✓ Severe rash reported ✓ C/I: ombitasvir/paritprevir/ritonavir and dasabuvir regimens
		Nevirapine	NVP	Viramune	 200 mg IR tab 400 mg SR tab	None	200 mg QD X 14 days then 200 mg po BID OR 400mg XR QD	<ul style="list-style-type: none"> • Rash 37% • Hepatic failure • Fever • Nausea 	CYP3A4 substrate Potent inducer of CYP2B6/ 3A4	<ul style="list-style-type: none"> ✓ Black Box: severe rash & hepatotoxicity ✓ higher CD4 associated with hypersensitivity → can treat through rash, but if with fever and elevated LFTs = sign of hypersensitivity ✓ Avoid Strong inducers of CYP3A4 (Carbamazepine) ✓ Lead-in phase to reduce rash, occurs in 1st 6 wks, more in women... also drug is auto inducer (will reduce its own level) ✓ XR version (400 mg QD) <i>more common</i>
		Rilpivirine	RPV	Edurant	 25 mg tab	Complera ^{TDF 1 QD} Odefsey ^{TAF 1 QD} Juluca ^{1 QD}	25 mg po QD <i>w/ food ++</i>	<ul style="list-style-type: none"> • Rash 3% • Headache 3% • Insomnia • Depression 8% • Hyperlipidemia • Hepatotoxicity 	CYP3A4 Substrate ↓[Edurant] with: Inducers of 3A Drugs ↑ pH	<ul style="list-style-type: none"> ✓ Among smallest HIV tablets ✓ Best absorbed with a good meal (350-500 calories) ✓ PPI contraindicated, H-2 blockers need dose reduction. ✓ Favorable lipid profile ✓ Lower virologic efficacy, not suggested for VL > 100,000 & CD4 < 200 ✓ Being studied (Phase 3 with CAB) as long-acting injectable ✓ Can exacerbate psych symptoms ✓ Added QTc prolongation

Class		Generic	Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments	
Integrase Strand Transfer Inhibitors - INSTI Favorable lipid profile as a class Resistance: Low genetic barrier to resistance with RAL and EVG. Possibly higher with DTG. Class Interaction: Oral absorption is diminished when co-administered with polyvalent cations (Mg, Ca, Al, Fe...). • BIC: take 2 hrs apart or together with food • DTG: take 2 hrs before/6 hrs after or together with food • EVG: take 2 hrs apart • RAL: avoid (only Ca OK with Isentress; not HD)	Integrase Strand Transfer Inhibitors ____tegravir	Bictegravir	BIC	-	 (Biktarvy)	Biktarvy ^{1 QD}	50mg po QD	Well Tolerated • Headache • Nausea/Diarrhea • Insomnia	CYP3A & UGT1A1 substrate (~50:50) Inhibits OCT2 & MATE1 • ↑[Metformin]	<ul style="list-style-type: none"> ✓ Only exists in combination ✓ Increase serum creatinine due to tubular inhibition without affecting glomerular function (increases usually in the first 4 weeks with median increase of 9.96umol/L after 48 weeks) ✓ May increase bilirubin ✓ Interacting classes: anticonvulsants, rifamycins, atazanavir
	Dolutegravir	DTG	Tivicay	 50 mg tab	Triumeq ^{1 QD} Juluca ^{1 QD} Dovato ^{1 QD}	50 mg po QD 50 mg po BID*	Well Tolerated • Insomnia • Headache • ↑ SCr small (↑~0.11mg/dL)	No CYP3A4 inx P-gp, UGT1A1, CY3A4(10-15%)substrate Inhibits OCT2 - Metformin (inc 2 fold [metformin]) - C/I Dofetilide	<ul style="list-style-type: none"> ✓ No food requirements ☺ ✓ Inhibits renal tubular secretion of creatinine, SCr “falsely” increases ✓ May cause neural tube defects if taken at the time of conception ✓ DTG should not be initiated during first trimester ✓ Higher barrier to resistance than EVG or RAL ✓ Diarrhea <u>un</u>common ✓ *BID dosing if heavily tx-experienced, INSTI resistant, or given w enzyme inducers ✓ High efficacy in those with baseline HIV RNA > 100,000 copies/mL ✓ C/I: Dofetilide 	
	Elvitegravir	EVG	Vitekta	 85, 150 mg tab	Stribild Genvoya	85-150 mg po QD ^{boosted} w/ food	Well Tolerated • Hyperlipidemia • D/N • Headache	CYP3A4 substrate induces 2C9	<ul style="list-style-type: none"> ✓ Better absorption w food/snack ✓ Coformulated with PK booster cobicistat ✓ Cobicistat inhibits tubular secretion of creatinine w/o affecting glomerular function (if >35.36umol/L need renal monitoring) ✓ Lower genetic barrier to resistance than PIs or DTG ✓ C/I: Eplerone, Lovastatin 	
	Raltegravir	RAL	Isentress & Isentress HD	 400 mg tab 600mg tab (HD)	None	400 mg po BID 1200 mg po QD ^{new study QDMRK}	Well Tolerated • Rash • N/D, Headache • Insomnia ↑ LFTs, ↑ CK, rhabdo	No CYP3A4 inx UGT1A1 substrate	<ul style="list-style-type: none"> ✓ Take without regards to meals ✓ 1st to market INSTI → Being studied: 1200 mg po QD (given as 2X 600mg) ✓ Aluminum or Magnesium antacids reduce abs'n RAL (Can take Ca Antacids if on Isentress, NOT Isentress-HD) ✓ Lower genetic barrier to resistance than PIs or DTG ✓ Avoid strong inducers of UGT (ie carbamazepine) 	
	Cabotegravir	CAB	TBD	? 200 mg/mL inj 30 mg tab	TBD	400 mg CAB + 600 mg RPV IM q4w (TBD)	TBD	TBD	<ul style="list-style-type: none"> ✓ As of Feb 2019 in phase 3 trials → LATTE-2 : 96 week results published July 2017, FLAIR: 48 week results published Oct 2018 ✓ 1st long acting injectable ART, nuc sparing regimen under study with RPV 	

Class		Generic	Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments
Protease Inhibitors - PI	Protease Inhibitor ____navir	<u>Ritonavir</u> PK booster	RTV	Norvir  100 mg tab 80 mg/mL oral	None	100-200 po/day	<ul style="list-style-type: none"> Bitter aftertaste Numbness around mouth at HIV doses N/V/D ↑ LFTs, ↑ TG Hyperlipidemia 	<u>Inducer of:</u> <ul style="list-style-type: none"> 1A2, 2B6, 2C9, 2C19, UGT <u>Inhibitor of:</u> <ul style="list-style-type: none"> 3A4 strong 2D6, 2C8, 	<ul style="list-style-type: none"> ✓ Black Box: many drug interactions → life threatening ✓ Extremely strong inhibition 3A4 & PGP ✓ HIV active at higher doses but toxicity & inx (not used for HIV treatment) ✓ 100 mg per dose to boost (e.g. if using with BID drug, give 100 mg BID) ✓ Fluorinated steroids (even inhaled) can lead to cushing's syndrome
	Class S/E: Hyperlipidemia								
	MOA: High genetic barrier to resistance when boosted	<u>Darunavir</u>	DRV	Prezista  <u>Prezista:</u> 600, 800 mg tab <u>Prezcobix:</u> 800 mg + 150 mg COB tab	Prezcobix ^w cobicistat 1 QD Symtuza ^w cobicistat 1 QD	600 mg po BID or 800 mg po QD w/ food + RTV 100 mg QD-BID or cobicistat 150 mg QD	<ul style="list-style-type: none"> Rash 10% Headache N/D ↑ amylase Hepatotoxic Kidney stones? 	<ul style="list-style-type: none"> CYP3A4 Substrate/ Inhibitor CYP 2C9 inducer Failure of contraceptives 	<ul style="list-style-type: none"> ✓ Currently highest prescribed PI: 2nd Gen PI ✓ Works in those who are resistant to other PIs ✓ Cobicistat will cause tubular creatinine reabsorption → SCr "pseudo" rise of 10-30 mmol/L from pts normal baseline ✓ Needs RTV or COBI boosting ✓ When boosted with RTV: 800 QD + 100 mg RTV for naive, [600 mg + 100 RTV] BID for experienced ✓ Contains Sulfa moiety ✓ Avoid with use of drugs that depend on CYP3A4 metabolism and has narrow therapeutic window (ie Alfuzosin)
	1 st gen PIs not used usually: Fosamprenavir FPV (Telzir) Indinavir IDV (Crixivan) Nelfinavir NFV (Viracept) Saquinavir SQV (Invirase) Tipranavir TPV (Aptivus)	<u>Atazanavir</u>	ATV	Reyataz  <u>Reyataz:</u> 150, 200, 300mg tab <u>Evotaz:</u> 300 mg + 150 mg COB tab	Evotaz ^w cobicistat	300 mg po QD boosted w RTV 100 mg or cobicistat 150 mg 400 mg po QD unboosted w/ food (>390 cal)	<ul style="list-style-type: none"> Kidney stone 10 fold inc Increased billi 60% (cosmetic, not harmful) D/N/Abd pain Headache 6% Rash 20% 	<ul style="list-style-type: none"> CYP3A4 substrate inducers/inhibitors of 3A4 will interact Drugs inc pH 	<ul style="list-style-type: none"> ✓ 2X150 mg (300 mg) + RTV 100 mg daily (TDF increases excretion of ATZ) ✓ 2X200 mg (400 mg) unboosted with Kivexa (needs RTV boost w others) ✓ Increased QTc, PR, more torsades ✓ Jaundice as result of increased direct bilirubin → not harmful, pt may decide to switch for cosmetic reason ✓ Absorption reduced when taken with H2Ra and PPI ✓ H2RA: Unboosted → ATV ≥ 2 hrs before or ≥ 10 hrs after Boosted → same time or >10 hrs after H2RA ✓ PPI: Unboosted → not recommended for co-administration, Boosted → ≥ 12 hrs after PPI ✓ Consider avoiding in CKD
		<u>Lopinavir</u> / RTV	LPV	Kaletra  200 mg + 50 mg RTV tab	Kaletra ⁴ QD	400 mg po BID 800 mg po QD	<ul style="list-style-type: none"> Diarrhea 24% N ↑ LFTs, billi, Lipids, MI 	<ul style="list-style-type: none"> CYP3A4 Substrate/ Inhibitor Many ↑ [benzos] Fentanyl Phenytoin 	<ul style="list-style-type: none"> ✓ Dangerous (deadly) interaction with fentanyl ✓ Unpredictable interaction with phenytoin → RTV inhibitor, LPV inducer of CYP. Unpredictable pheny level (unpredictable) ✓ +++ diarrhea, worse with q24h ✓ May need higher doses if tx experienced or later in pregnancy ✓ May have Cardiac risk

Class		Generic	Brand	Preparations	Combo Pill	Dosing	Side Effects	Drug Interactions	Comments	
CCR-5	CCR-5 Co Receptor Antagonists	Maraviroc	MVC	Celsentri	 150, 300 mg tab	None	150-600 mg po BID Standard: 300mg BID w/ or w/o food	<ul style="list-style-type: none"> cough¹³ Rash^{10%}, Abdo pain Dizziness, myalgia Ortho hypo, syncope Upper resp infection 	<p>CYP3A4, P-gp substrate</p> inducers/inhibitors of 3A4 or P-gp will interact	<ul style="list-style-type: none"> ✓ Black Box: hepatotoxicity, inc MI? ✓ Used later in tx only for CCR-5-tropic HIV virus, cannot use for CXCR-4-tropic virus which is seen more and more in advance dx ✓ Avoid: Rifapentine, Dasabuvir + Ombitasvir/Paritaprevir/RTV
Fusion Inhibitor		Enfuvirtide	ENF	Fuzeon	 90 mg vial	None	90 mg SC BID	<ul style="list-style-type: none"> Inj site reaction^{~100% pt} Bacterial pneumonia Hypersensitivity^{<1%} 	Neither inducer or inhibitor of CYP enzymes	<ul style="list-style-type: none"> ✓ Was historically used in era between 1st and 2nd generation PIs ✓ Unstable drug, dose needs to be prepared before administering each dose ✓ No cross resistance with other ARVs
Entry Inhibitor		Ibalizumab-uiyk	IBA	Trogarzo	 150mg/mL vial	None	2000mg IV single dose then, 800mg Q2W	<ul style="list-style-type: none"> Dizziness Diarrhea, Nausea Skin Rash 	Neither inducer or inhibitor of CYP enzymes	<ul style="list-style-type: none"> ✓ Indication: Treatment of HIV with combination of other ARV in heavily experienced patients who has multidrug resistant infection and is failing current therapy ✓ Infused over 15-30 minutes (Loading dose no less than 30 minutes) ✓ Each 2 mL vial delivers 1.33mL containing 200mg of IBA ✓ If maintenance dose missed (>3 days) then loading dose needs to be given again ✓ No cross resistance with other ARVs ✓ Not Approved in Canada yet
gp120 Attachment Inhibitor		Fostemsavir	FTR	TBD	-	None	?600mg BID + OBT	<ul style="list-style-type: none"> Headache Skin Rash Micturition Urgency N/V/D Fatigue 	<p>CYP3A4 Substrate (Partial)</p> Neither inducer or inhibitor of CYP enzymes	<ul style="list-style-type: none"> ✓ As of Feb 2019: Phase 3 BRIGHT study → 24 wk results published 2017 ✓ Investigating its use in heavily treatment experienced HIV patients with limited remaining options ✓ Prodrug of small molecule Temsavir

OBT = optimized background therapy